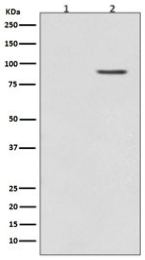
Phospho-BRAF T401 Antibody IBE-2 / BRAF pT401 Antibody [clone IBE-2] (RQ5439)

Catalog No.	Formulation	Size
RQ5439	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Bulk quote request

Availability	1-2 weeks
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Rabbit
Clonality	Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	IBE-2
Purity	Affinity purified
UniProt	P15056
Applications	Western blot: 1:500
Limitations	This Phospho-BRAF T401 Antibody IBE-2 / BRAF pT401 Antibody is available for research use only.



Phospho-BRAF T401 Antibody IBE-2 Detection in TPA-Treated PC-12 Cells WB. Western blot analysis of rat PC-12 pheochromocytoma cell lysates using Phospho-BRAF T401 Antibody clone IBE-2. Lane 1 contains untreated cells and lane 2 contains cells treated with TPA. A strong phosphorylation-dependent band is detected at approximately 85-95 kDa following TPA treatment, while little to no corresponding signal is visible in the untreated sample, demonstrating detection of BRAF pT401 under the tested conditions.

Description

Phospho-BRAF T401 Antibody IBE-2 / BRAF pT401 Antibody detects BRAF phosphorylated at threonine 401. BRAF is a serine/threonine protein kinase in the RAF family and a central component of the RAS-RAF-MEK-ERK signaling pathway. Through activation of MEK and downstream ERK proteins, BRAF participates in signaling that regulates cell proliferation, differentiation, survival and responses to extracellular stimuli.

BRAF activity is controlled by protein interactions, conformational changes and phosphorylation at multiple regulatory sites. These modifications can influence RAF activation, protein interactions and downstream signaling. Phosphosite-specific detection therefore provides information about BRAF regulation that is distinct from measurement of total protein abundance. A BRAF pT401 Antibody can be used to investigate changes in phosphorylation at this regulatory region of BRAF under different signaling conditions.

RAF-MAPK signaling has important roles in normal physiology and disease. Aberrant BRAF activity is particularly significant in cancer, where activating mutations and dysregulated signaling can promote persistent MEK-ERK pathway activation. Analysis of BRAF phosphorylation can complement total BRAF measurements in studies of pathway regulation, extracellular stimulation, feedback signaling and cellular responses to pathway-modulating conditions.

Clone IBE-2 is a mouse monoclonal antibody directed against BRAF phosphorylated at T401. Its phosphosite-specific recognition differentiates it from antibodies measuring total BRAF and from reagents directed against other BRAF phosphorylation sites. This makes the antibody useful for examining site-specific changes in BRAF phosphorylation within the broader RAF-MAPK signaling network.

For phosphorylation-specific reagents targeting additional proteins and regulatory sites, explore our Phospho Antibody Ã¢Â€Â“ Phosphorylation Specific Antibodies page. Researchers requiring detection of total BRAF independent of T401 phosphorylation can also see our BRAF Antibody BRAF/1626 / B-Raf Kinase Antibody page. NSJ Bioreagents provides antibodies for research into protein phosphorylation and signal transduction. A Phospho-BRAF T401 Antibody provides a research tool for investigating BRAF Thr401 phosphorylation and its relationship to RAF-MAPK pathway regulation.

For phosphorylation-specific reagents targeting additional proteins and regulatory sites, explore our Phospho Antibody Ã¢Â€Â“ Phosphorylation Specific Antibodies page.

Researchers requiring detection of total BRAF independent of T401 phosphorylation can also see our BRAF Antibody BRAF/1626 / B-Raf Kinase Antibody page.

Application Notes

Optimal dilution of the Phospho-BRAF T401 Antibody IBE-2 / BRAF pT401 Antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to human B Raf (surrounding pT401) was used as the immunogen for the Phospho-BRAF T401 Antibody IBE-2.

Storage

Store the Phospho-BRAF T401 Antibody IBE-2 at -20oC.

Alternate Names

BRAF pT401 antibody, BRAF phospho-T401 antibody, BRAF phospho-Thr401 antibody, Phospho-BRAF Thr401 antibody, B-Raf pT401 antibody, B-Raf phospho-Thr401 antibody

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